



Draft Environmental Assessment

## **Village of Western Springs South Fire & EMS Facility**

Village of Western Springs, Illinois  
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# FEMA

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FEMA Region V  
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## **ACRONYMS**

ADA	Americans with Disabilities Act
ADT	Average Daily Traffic (in vehicles)
AFGP	Assistance to Firefighters Grant Program
ALS	Advanced Life Support
ARRA	American Recovery and Reinvestment Act
BMP	Best Management Practice (for Water Quality)
BNSF	Burlington Northern Santa Fe Railroad
BOCA	Building Officials and Code Administrators, Inc.
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CWA	Clean Water Act
dB	decibel
DHS	U. S. Department of Homeland Security
EA	Environmental Assessment
EcoCAT	Ecological Compliance Assessment Tool (IDNR)
EIS	Environmental Impact Statement
EMS	Emergency Medical Service
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FSC	Fire Station Construction grants
HAARGIS	Historic Architectural/Archeological Resources Geographic Information System
HSG	Hydraulic Soil Group
IDNR	Illinois Department of Natural Resources
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Agency
IHPA	Illinois Historic Preservation Agency
ISO	International Organization for Standardization
Ldn	Day-Night Average Sound Level (in decibels)
MABAS	Mutual Aid Box Alarm System
METRA	Northern Illinois Regional Commuter Railroad Corporation
NAAQS	National Ambient Air Quality Standards
NACD	Native American Consultation Database
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association

NHPA	National Historic Preservation Act
NO <sub>2</sub>	nitrogen dioxide
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O <sub>3</sub>	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PM <sub>2.5</sub>	particulate matter less than 2.5 microns
PM <sub>10</sub>	particulate matter less than 10 microns
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Officer
SO <sub>2</sub>	sulfur dioxide
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
UASI	Urban Area Security Initiative (Cook County, Illinois)
USACE	U. S. Army Corps of Engineers
USDA	U. S. Department of Agriculture
USEPA	U. S. Environmental Protection Agency
USFWS	U. S. Fish and Wildlife Service
VOC	volatile organic compound

## **SECTION ONE: BACKGROUND**

### **1.1 PROJECT AUTHORITY**

The Village of Western Springs has applied for and been awarded a grant under the FEMA Assistance to Firefighters Grant Program (AFGP) – Fire Station Construction Grants (FSC) to construct a new fire station and EMS facility in the south portion of the Village. The objectives of the FEMA AFGP-FSC are to provide financial assistance directly to fire departments and nonaffiliated EMS organizations to build new or modify existing fire stations, to enhance their response capability and protect the community they serve from fire and fire-related hazards. The authority for the AFGP program is derived from the *Federal Fire Prevention and Control Act of 1974* (15 U.S.C. §§ 2229 *et seq.*), as amended. Congress appropriated a total of \$565 million for the FY 2009 AFGP program (Public Law 110-329). The authority for the FSC program is derived from the *American Recovery and Reinvestment Act (ARRA) of 2009*, as amended. Congress appropriated a total of \$210 million for the FY 2009 FSC program (Public Law 111-5).

The primary goal of the program is to help fire departments and nonaffiliated EMS organizations meet their firefighting and emergency response needs. The program seeks to support organizations and their emergency response personnel that lack the tools and resources necessary to more effectively protect the health and safety of the public with respect to fire and all other hazards.

In accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500 through 1508), and Federal Emergency Management Agency (FEMA) regulations for NEPA compliance (44 CFR Part 10), FEMA must fully understand and consider the environmental consequences of actions proposed for Federal funding. The purpose of this Environmental Assessment (EA) is to meet FEMA's responsibilities under NEPA and to determine whether to prepare a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the proposed project.

### **1.2 PROJECT LOCATION**

The Village of Western Springs is a suburban residential community located approximately five miles west of the Chicago city limits. It is located east of Interstate 294, in west-central Cook County, in northeast Illinois; and is included in the Cook County Urban Area Security Initiative (UASI) planning area. The Village of Western Springs has a population of 12,500 and encompasses 2.719 square miles (4,600 persons per square mile).

The new Fire and EMS Facility will be constructed within the Village of Western Springs corporate limits for use by the Village of Western Springs Fire Department. The proposed site is located on the southeast corner of Grand Avenue and 55<sup>th</sup> Street, and encompasses approximately 0.4 acres. Location maps and aerial photographs are provided in Appendix A.

### **1.3 PURPOSE AND NEED**

The Western Springs Fire Department is a combination urban fire department providing fire and emergency medical services to its residents. The Department is staffed by nine full-time, two part-time and 38 paid-on-call personnel operating out of a single station. All personnel are trained and certified to meet NFPA 1001 requirements, with scheduled recurring training conducted on a daily basis. The Department provides and receives automatic mutual aid fire and EMS response and is an active participant of MABAS, the interstate mutual aid organization. The Western Springs mutual aid response area includes hazards that range from multi-story commercial and residential properties, to heavy industry, petroleum refineries, Argonne National Laboratory and the largest UPS package distribution center. In 2008, the Department responded to 1,698 calls for service. The Department operates three engine companies, one ladder company, two Advanced Life Support (ALS) ambulances and one command vehicle. The Department is rated ISO Class 3.

Currently, all fire and EMS equipment is housed in a single fire station located in the northern third of the Village, north of the BNSF Railroad transcontinental main line (three tracks). Recent annexation of a large residential development at the south end of the Village has resulted in two thirds of the Village now being located south of the railroad tracks. The southern portion of the Village is accessed by a single, two-lane arterial street (Wolf Road) that carries a substantial traffic volume (11,100 vehicles per day Average Daily Traffic [ADT]), resulting in frequent traffic gridlock. Increased train frequency (160 trains per day) and high vehicular traffic volumes cause frequent emergency response delays. Additionally, incoming off-duty personnel from the south area of the Village are similarly impacted by heavy traffic and railroad delays as they respond to in order to staff follow-on companies; and may be required to answer a call in the south part of the Village, where they started. This delay in response time adversely affects citizen safety, and can also affect firefighter safety if follow-on companies are delayed. In 2008, there were 119 documented train-delayed emergency responses, with a few over eight minutes long.

There are only three streets which cross the railroad tracks in the Village (Grand Avenue, Lawn Avenue and Wolf Road). Because the streets are spaced only 450 feet apart, when one crossing is closed due to train traffic, the other two are also closed. Given the limited connectivity of streets near the rail line, the frequency of rail traffic, the urban nature of the community (vehicular and pedestrian traffic), possible future residential and commercial development, and the nature of fire and EMS operations in Western Springs, the need for a south side satellite fire station has been demonstrated. Building a south side satellite fire station, reallocating existing equipment and redirecting manpower will significantly improve response times and provide increased safety for citizens and firefighters. The new station will reduce delays in the primary response area as well as mutual response areas. The Village of Hinsdale (adjacent to the west limits of Western Springs and with a population of 19,000) has a similar train-delay problem, with half of their community being located south of the railroad tracks. The new station will permit the Western

Springs Fire Department to meet the requirements of NFPA 1710 and ISO for response time and distance.

The objectives of the FEMA Assistance to Firefighters Grant Program (AFGP) are to provide financial assistance directly to fire departments and nonaffiliated EMS organizations to enhance their capabilities with respect to fire and fire-related hazards. In accordance with Federal laws and FEMA regulations, the EA process for proposed Federal action must include an evaluation of alternatives and a discussion of the potential environmental impacts. This EA was prepared in accordance with FEMA's regulations as required under NEPA. As part of this NEPA review, the requirements of other environmental laws and executive orders are addressed.

## **1.4 EXISTING FACILITY**

The existing Village of Western Springs fire station is located at 4353 Wolf Road, 400 feet north of the BNSF Railroad transcontinental main line. Originally built as a public works garage in 1953, it was reconfigured as a fire station in 1968 and has been modified to accommodate full-time staff (24/7/365). The station has three double-deep bays that currently house three engines, one 105-foot aerial ladder truck, two ALS ambulances and one mobile command trailer. The command vehicle and a mobile light plant (with emergency generator) are housed outside due to lack of space within the existing station. There are two dormitory-style bunk rooms, with the men's bunk room containing seven beds and the women's bunk room containing two beds.

## **SECTION TWO: ALTERNATIVE ANALYSIS**

Three alternatives were considered to address the Village of Western Springs Fire Departments needs to:

- Reduce or eliminate train delays
- Shorten emergency response distance
- Improve emergency response time
- Meet NFPA and ISO standards
- Improve multi-company operation times, including Rapid Intervention Teams (RIT)
- Enhance mutual aid capabilities
- Complete construction and be operational as soon as possible

The three alternative studied were the No Action alternative, the Remodel Existing Facility alternative, and the New South Side Fire & EMS Facility alternative. Additionally, several sites were considered for the third alternative before deciding on the proposed location.

### **2.1 ALTERNATIVE 1 – NO ACTION**

Under the No Action Alternative, the Village of Western Springs Fire Department would continue to operate from the existing 57-year-old facility. There would be no environmental

impacts associated with the No Action Alternative, but the needs of the Western Springs Fire Department would not be addressed. The existing fire station is separated from approximately 65% of the Village by the railroad tracks and is over two miles from the south Village limits. Under the No Action Alternative, heavy traffic and train delays would continue to cause response times in excess of NFPA and ISO standards, affecting the safety of the public and the firefighters.

## **2.2 ALTERNATIVE 2 – REMODEL EXISTING FACILITY**

The existing fire station is located at 4353 Wolf Road. Originally built as a public works garage in 1953, it was reconfigured as a fire station in 1968 and has been modified to accommodate full-time staff. The existing fire station is overcrowded, with three engines, a ladder truck and two ambulances shoehorned into three double-deep bays. While it is centrally located, it is landlocked, with limited room for expansion. An addition on the north end of the building would require relocation of the parking lot into the wooded lawn area, but it may be possible to provide another double-deep bay, allowing the command vehicle to be parked inside. An additional bunk room could provide sleeping quarters for additional firefighters as well.

There would be only limited environmental impacts associated with the Remodel Existing Facility Alternative, but the needs of the Western Springs Fire Department would not be addressed. The expanded fire station would still be separated from approximately 65% of the Village by the railroad tracks and would still be 2.25 miles from the south Village limits. Under the Remodel Existing Facility Alternative, heavy traffic and train delays would continue to cause response times in excess of NFPA and ISO standards, affecting the safety of the public and the firefighters.

## **2.3 ALTERNATIVE 3 – NEW SOUTH SIDE FIRE & EMS FACILITY AT 5000 WOLF ROAD**

Another option was to construct a fire station on the west side of Wolf Road, approximately 0.65 miles north of 55<sup>th</sup> Street. The Village acquired the property at 5000 Wolf Road and razed the existing house. Together with the adjacent unimproved right-of-way for 50<sup>th</sup> Street, this provided a 120 ft x 180 ft (0.5 acre) lot fronting Wolf Road. There would be only limited environmental impacts associated with the New South Side Facility at 5000 Wolf Road Alternative, and the needs of the Western Springs Fire Department would be addressed. The new fire station would be located south of the railroad tracks, eliminating train delays and would be 0.8 miles closer to the south Village limits.

## **2.4 ALTERNATIVE 4 – NEW SOUTH SIDE FIRE & EMS FACILITY AT 5501 GRAND AVENUE (PROPOSED ACTION)**

The new south side satellite fire station and EMS facility at the southeast corner of Grand Avenue and 55<sup>th</sup> Street, only 0.7 miles from the south Village limits, will provide the current and

future needs of the Western Springs Fire Department, as outlined above. The proposed site is currently a vacant lot, with mowed turf grass for ground cover, and is owned and maintained by the Village of Western Springs. The lot was previously zoned O-1 (Limited Office) and contained a single-story office building. The office building was constructed in the mid-1960s and used by Bellevue Builders, Inc., a residential development company. It was subsequently used as an office for the Timber Trails Country Club, Inc., before being purchased by the Village and razed. A 1951 aerial photograph shows the site and surrounding property being used for farm fields. A 1962 aerial photograph shows the lot as vacant land, with residential development to the north, commercial development to the east, and a golf course to the south. A 1971 aerial photograph shows the lot with the office building, commercial development to the east, and residential development to the north, west and south. The surrounding properties were developed in the 1950s and 1960s as residential and commercial properties, and were used as farmland prior to development. Historic aerial photographs from the Huff & Huff report are provided in Appendix A.

The proposed project consists of a single-story satellite fire station and EMS facility, approximately 7,000 square feet in size and 28 feet tall to the peak of the roof. The design team concluded that a larger station was not functionally required or fiscally responsible. The station was architecturally designed to reflect the residential character of the neighborhood. All parking will be on-site, south of the building, and the parking area will be shielded from view by fencing and decorative landscaping. The Grand Avenue pavement will be widened by six feet where it meets 55<sup>th</sup> Street to accommodate turning movements of fire trucks entering and leaving the station. The emergency generator will be located inside the building to reduce noise. Lighting and landscaping will have a residential character. Minimal signage is planned.

The proposed project will be designed and constructed in accordance with the ADA, the BOCA Building Code, local ordinances and Federal regulations. The building will be equipped with a fire alarm and fire suppression (sprinkler) system. The on-site emergency generator will power the entire facility if there is a power failure. The station will have two double-deep bays and will house two engines, one ambulance, one command vehicle and one mobile light plant. The station is designed to accommodate up to six full-time firefighters and EMS personnel (24/7/365), and will have provisions for off-duty personnel to man follow-on equipment for unimpeded response throughout the Village. The facility will include living spaces, including a kitchen, dining area, dayrooms, bathrooms, six individual gender-specific bunk rooms and a physical fitness room.

An underground stormwater detention facility will be constructed beneath the proposed parking lot. The facility will consist of a 91'-5" long x 27'-6" wide x 4'-3" tall StormTrap concrete vault, installed on a 93'-5" long x 29'-6" wide x 8" thick concrete slab. Construction of the facility will require 732 cubic yards of earth excavation. The completed facility will temporarily store 8,086 cubic feet of stormwater runoff until it can be slowly released through a restrictor, to the existing Village of Western Springs storm sewer system on Grand Avenue.

A six-foot high fence will be constructed along the south property line to shield the residential property to the south from sight and sound. Parking lot lighting will also be shielded to avoid light spillover onto the adjoining residential property.

## **2.5 OTHER ALTERNATIVE SITES**

The Village of Western Springs studied several other available properties south of the BNSF railroad tracks to determine the best location for a new fire and EMS facility. Possible sites were judged for their proximity to major streets (to reduce emergency response times), for the impact to neighboring properties, and for the cost of acquisition and development. Sites were chosen outside of areas known for past flooding.

Sharing the fire station at 1970 Plainfield Road with the Pleasantview Fire Protection District, in LaGrange Highlands, Illinois, was examined and rejected. In addition to several operational and financial issues, this location would have done little to improve overall fire and emergency medical services for most parts of the Village south of the BNSF railroad tracks.

Another option was to construct a fire station on the west side of Wolf Road, approximately 0.65 miles north of 55<sup>th</sup> Street. The Village acquired the property at 5000 Wolf Road and razed the existing house. Together with the adjacent unimproved right-of-way for 50<sup>th</sup> Street, this provided a 120 ft x 180 ft (0.5 acre) lot fronting Wolf Road. Ultimately, this site was not chosen for three reasons. Although the site is across the street from St. John of the Cross church and elementary school, it is bordered on the north, west and south sides by existing houses, and the impacts to the neighbors would be significant. Secondly, although the roadway pavement was never constructed in the 50<sup>th</sup> Street right-of-way, public utilities were installed and the use of the parcel would require the relocation of these utilities. Finally, the location is south of the railroad tracks, but it is closer to the tracks than to the south end of the Village, overlapping the service area of the existing fire station to a greater extent, and providing longer response times to the south end of the Village, than the proposed 55<sup>th</sup> Street site.

Other sites were also considered, but 5501 Grand Avenue presented a unique opportunity for constructing a centrally-located satellite fire station in the southern part of the Village, with immediate and safe access to major arterial streets. It was also suitably located in an area of transitional zoning, between more intensely developed commercial properties to the east and the less intensely developed residential properties to the south and west. The building is designed to look residential and for most of the day will function as a quiet and unobtrusive facility. On the two or three times per day when it will actively function as a fire/EMS facility, response equipment will utilize four-lane 55<sup>th</sup> Street (other than calls to the adjacent residential subdivision).

## **SECTION THREE: AFFECTED ENVIRONMENT AND IMPACTS**

### **3.1 PHYSICAL ENVIRONMENT**

#### **3.1.1 Geology, Seismicity and Soils**

The project area is located in west-central Cook County, in northeastern Illinois. The U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) online web soil survey indicates that the proposed Fire & EMS Facility site consists of Urban Land soil (Map Unit 923), which is a non-hydric soil. Northeastern Illinois is primarily covered by Pleistocene glacial drift deposits overlying Silurian carbonate bedrock. Drift thickness varies from less than 10 feet to greater than 200 feet. Surface soils in the vicinity of the proposed site are dominated by silty clays and silty-clay loams.

Ground water is present in soil and bedrock aquifers in northeastern Illinois. Shallow aquifers include Wisconsin-age glacial drift aquifers and Silurian dolomite aquifers. These aquifers are recharged from local precipitation and surface stream inflow, and are locally interconnected. Two major deep aquifer systems include a Cambrian-Ordovician bedrock aquifer and a Mt. Simon bedrock aquifer. A shale formation acts as an effective confining layer between the shallow aquifers and the bedrock aquifers.

Since 1795, there have been only three recorded earthquakes in Cook County and one earthquake each in adjacent DuPage County and Will County. Maps prepared by the Illinois State Geological Society show an 1804 event (magnitude 4.5 to 4.9) in north-central Cook County, a 1909 event (magnitude over 5.0) in northeast Will County, a 1911 event (magnitude 3.2) in eastern Cook County, a 1928 event (magnitude 3.2) in northeast Cook County, and a 1985 event (magnitude 3.0) in east-central DuPage County. Copies of the earthquake maps are provided in Appendix A.

The Farmland Protection Policy Act (FPPA) states that Federal agencies must minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses. The proposed site was converted from farmland to a developed commercial property in the mid-1960s, so the FPPA does not apply. This can be confirmed by the historic aerial photographs in Appendix A.

Alternative 1, No Action Under this alternative, there will be no construction and no impacts to geology or soils.

Alternative 2, Expand Existing Facility Under this alternative, construction activities would not be deep enough to impact underlying geologic resources. Short-term impacts to soils would occur during the construction period. Appropriate Best Management Practices (BMPs), such as silt fence, erosion blanket, and prompt reestablishment of vegetative ground cover would be used to minimize sedimentation and soil erosion. Approximately 965 cubic yards of earth excavation

would be required to construct the proposed building footings (160 cu yd), sanitary sewer service (25 cu yd), potable water service (50 cu yd), and underground stormwater runoff detention facility (730 cu yd). All excavated material would be trucked off-site and disposed of by the contractor in such a manner that public or private property will not be damaged or endangered. The site is in an urban area, so most of the excavation would take place on previously disturbed soil.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, construction activities would not be deep enough to impact underlying geologic resources. The proposed fire station will not have a basement, so excavation will not exceed five feet for building foundations, light pole foundations, utilities to the fire station, and the proposed parking lot construction. Short-term impacts to soils would occur during the construction period. Appropriate Best Management Practices (BMPs), such as silt fence, erosion blanket, and prompt reestablishment of vegetative ground cover would be used to minimize sedimentation and soil erosion. Approximately 965 cubic yards of earth excavation would be required to construct the proposed building footings (160 cu yd), sanitary sewer service (25 cu yd), potable water service (50 cu yd), and underground stormwater runoff detention facility (730 cu yd). All excavated material would be trucked off-site and disposed of by the contractor in such a manner that public or private property will not be damaged or endangered. The site is in an urban area, so most of the excavation would take place on previously disturbed soil.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, construction activities would not be deep enough to impact underlying geologic resources. The proposed fire station will not have a basement, so excavation will not exceed five feet for building foundations, light pole foundations, utilities to the fire station, and the proposed parking lot construction. Short-term impacts to soils would occur during the construction period. Appropriate Best Management Practices (BMPs), such as silt fence, erosion blanket, and prompt reestablishment of vegetative ground cover would be used to minimize sedimentation and soil erosion. Approximately 965 cubic yards of earth excavation would be required to construct the proposed building footings (160 cu yd), sanitary sewer service (25 cu yd), potable water service (50 cu yd), and underground stormwater runoff detention facility (730 cu yd). All excavated material would be trucked off-site and disposed of by the contractor in such a manner that public or private property will not be damaged or endangered. The site is in an urban area, so most of the excavation would take place on previously disturbed soil. A copy of the site plan showing areas of excavation is provided in Appendix A.

### **3.1.2 Water Resources and Water Quality (Surface Water)**

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into Waters of the United States. The proposed project consists of a 7,100 square foot Fire & EMS Facility and parking lot on a 0.4 acre site. Stormwater runoff detention will be provided, in accordance with Village requirements for

development. Stormwater will be collected by onsite storm sewers, which will be connected to the municipal storm sewer system on Grand Avenue. The municipal storm sewer system eventually discharges to Flagg Creek, 1,500 feet to the west.

Alternative 1, No Action Under this alternative, there will be no construction and no impacts to water resources and surface water quality.

Alternative 2, Expand Existing Facility Under this alternative, short-term impacts to water resources and surface water quality would occur during the construction period. The existing Fire & EMS Facility is located on a developed parcel, with no standing water or wet areas on site. Stormwater runoff would be directed to a proposed underground stormwater runoff detention facility; which would collect runoff from inlets in the parking lot, and discharge to the existing storm sewer system on Wolf Road. Appropriate Best Management Practices (BMPs), such as silt fence, erosion blanket, and prompt reestablishment of vegetative ground cover would be used to minimize sedimentation and soil erosion.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, short-term impacts to water resources and surface water quality would occur during the construction period. The property at this location is a vacant parcel, with no standing water or wet areas on site. Stormwater runoff would be directed to a proposed underground stormwater runoff detention facility; which would collect runoff from inlets in the parking lot, and discharge to the existing storm sewer system on Wolf Road. Appropriate Best Management Practices (BMPs), such as silt fence, erosion blanket, and prompt reestablishment of vegetative ground cover would be used to minimize sedimentation and soil erosion.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, short-term impacts to water resources and surface water quality would occur during the construction period. The proposed Fire & EMS Facility is located on a vacant parcel, with no standing water or wet areas on site. Stormwater runoff will be directed to a proposed underground stormwater runoff detention facility; which will collect runoff from inlets in the parking lot, and discharge to the existing storm sewer system on Grand Avenue. Appropriate Best Management Practices (BMPs), such as silt fence, erosion blanket, and prompt reestablishment of vegetative ground cover would be used to minimize sedimentation and soil erosion.

### **3.1.3 Floodplain Management (Executive Order 11988)**

Executive Order (EO) 11988 (Floodplain Management) requires Federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. The Village of Western Springs, Illinois participates in the National Flood Insurance Program (NFIP) and flood hazard areas in the Village are illustrated on FEMA's Flood Insurance Rate Maps (FIRM). FIRM Panel 17031C0467 J shows that the proposed Fire and EMS Facility site is located on the southeast corner of the intersection of Grand Avenue and 55<sup>th</sup> Street, in un-

shaded Zone X, outside the limits of the 500-year floodplain. The nearest 100-year floodplain is Flagg Creek, approximately 0.3 miles to the west. The nearest 500-year floodplain is a rear yard swale approximately 620 feet northwest of the site, on the other side of 55<sup>th</sup> Street.

Documentation is provided in Appendix A.

Alternative 1, No Action Under this alternative, there will be no proposed construction and will therefore be no impact to 100-year floodplains.

Alternative 2, Expand Existing Facility Under this alternative, there will be no impacts to 100-year floodplains. The existing fire station is located on the east side of Wolf Road, south of 43<sup>rd</sup> Street and is in un-shaded Zone X, outside the limits of the 500-year floodplain. The nearest 100-year floodplain and 500-year floodplain are both approximately 0.8 miles to the north.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, there will be no impacts to 100-year floodplains. The site is located on the west side of Wolf Road, in un-shaded Zone X, outside the limits of the 500-year floodplain. The nearest 100-year floodplain is Flagg Creek, approximately 0.4 miles to the west. The nearest 500-year floodplain is approximately 0.2 miles to the west.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, there will be no impacts to 100-year floodplains. The proposed Fire and EMS Facility site is located on the southeast corner of the intersection of Grand Avenue and 55<sup>th</sup> Street, in un-shaded Zone X, outside the limits of the 500-year floodplain. The nearest 100-year floodplain is Flagg Creek, approximately 0.3 miles to the west. The nearest 500-year floodplain is a rear yard swale approximately 620 feet northwest of the site, on the other side of 55<sup>th</sup> Street.

### **3.1.4 Air Quality**

The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. Primary standards set limits to protect public health, including the health of “sensitive” populations such as asthmatics, children and the elderly. Secondary set limits to protect public welfare, including protection against decreased visibility, as well as damage to animals, crops, vegetation and buildings. Current criteria pollutants are carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), lead (Pb), particulate matter (PM<sub>10</sub>), and sulfur dioxide (SO<sub>2</sub>). Non-criteria pollutants include volatile organic compounds (VOCs).

According to the USEPA, Cook County, Illinois is classified as being a moderate attainment area for ozone pollution (8-hour ozone) and as being a nonattainment area for particulate matter (PM-2.5, 1997). Documentation is provided in Appendix A.

Alternative 1, No Action Under this alternative, there will be no proposed construction and would therefore be no impact to the local ambient air quality.

Alternative 2, Expand Existing Facility Under this alternative, temporary short-term impacts to local ambient air quality would occur during remodeling and construction activities at the existing fire station. To reduce impacts, the applicant will ensure that the construction contractors spray the site with water as needed, to mitigate airborne dust. Emissions from fuel-burning engines (construction equipment) could also temporarily increase the levels of some of the criteria pollutants, such as CO, NO<sub>2</sub>, O<sub>3</sub>, PM<sub>10</sub>, and non-criteria pollutants such as VOCs. To mitigate these emissions, fuel-burning equipment run times would be kept to a minimum and equipment would be properly maintained.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, temporary short-term impacts to local ambient air quality would occur during construction activities at the new fire station. To reduce impacts, the applicant will ensure that the construction contractors spray the site with water as needed, to mitigate airborne dust. Emissions from fuel-burning engines (construction equipment) could also temporarily increase the levels of some of the criteria pollutants, such as CO, NO<sub>2</sub>, O<sub>3</sub>, PM<sub>10</sub>, and non-criteria pollutants such as VOCs. To mitigate these emissions, fuel-burning equipment run times would be kept to a minimum and equipment would be properly maintained.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, temporary short-term impacts to local ambient air quality would occur during construction activities at the new fire station. To reduce impacts, the applicant will ensure that the construction contractors spray the site with water as needed, to mitigate airborne dust. Emissions from fuel-burning engines (construction equipment) could also temporarily increase the levels of some of the criteria pollutants, such as CO, NO<sub>2</sub>, O<sub>3</sub>, PM<sub>10</sub>, and non-criteria pollutants such as VOCs. To mitigate these emissions, fuel-burning equipment run times would be kept to a minimum and equipment would be properly maintained.

## **3.2 BIOLOGICAL ENVIRONMENT**

### **3.2.1 Terrestrial and Aquatic Environment**

The proposed project site (proposed action) is a vacant lot in a suburban environment, in the south central portion of the Village. From the mid-1960s until recently, the site contained a one-story office building and asphalt parking lot. The vegetative ground cover consists of mowed turf grass, with various trees and shrubs along the property lines and a few trees located in the former lawn areas. The proposed site supports wildlife common to suburban development, including songbirds and small mammals such as squirrels and rabbits. There is no standing water or other wet areas on site. The closest aquatic environment is an existing stormwater retention pond at the southeast corner of Lawn Avenue and 55<sup>th</sup> Street, approximately 300 feet east of the site. In addition to the wildlife mentioned above, it is anticipated that the off-site retention pond also

supports amphibians and reptiles. However, its normal 18 inch depth, together with extended periods of freezing weather each winter, likely precludes a sustainable fish population.

When the previous structure was removed, the shrubs around the foundation were left in place. Construction of the proposed improvements will require the removal of these shrubs, along with six 6" trees, three 10" trees, four 12" trees, three 14" trees and two 20" trees. Existing shrubs and bushes outside the limits of the proposed building and parking lot will be preserved. After construction, the proposed landscaping includes planting six trees and 35 shrubs along the south property line to provide visual and noise screening for the property to the south.

Alternative 1, No Action Under this alternative, the proposed site would remain mowed turf grass and there would be no impact to the existing wildlife population.

Alternative 2, Expand Existing Facility Under this alternative, the proposed site would remain mowed turf grass and there would be no impact to the existing wildlife population. A significant portion of the existing fire station property is building or pavement. Vegetative ground cover consists of mowed turf grass and landscaped areas, including large and mature trees, some of which would have to be removed. However, the impact of expanding the existing facility would be negligible to the existing wildlife population.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, the proposed site would be redeveloped with a building and a parking lot. The vegetative ground cover would remain mowed turf grass, with trees, shrubs and other landscaped areas being planted in appropriate locations to meet the Village Landscape Ordinance. A few large and mature trees would have to be removed to accommodate the proposed improvements. However, the impact to the existing wildlife population would be negligible.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, the proposed site would be redeveloped, with a building and a parking lot. Construction of the proposed improvements will require the removal of these shrubs, along with six 6" trees, three 10" trees, four 12" trees, three 14" trees and two 20" trees. Existing shrubs and bushes outside the limits of the proposed building and parking lot will be preserved. After construction, the proposed landscaping includes planting six trees and 35 shrubs along the south property line to provide visual and noise screening for the property to the south. The impact to the existing wildlife population will be negligible.

### **3.2.2 Wetlands (Executive Order 11990) / Waters of the U.S. Including Wetlands**

The USACE regulates the discharge of dredged or filled material into Waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). Additionally, EO11990 (*Protection of Wetlands*) requires Federal agencies to avoid, to the extent possible, adverse impacts on wetlands that may result from Federally funded actions.

According to the Soil Survey of DuPage and Part of Cook Counties, Illinois the site is located on Urban Land soil (Map Unit 923), a non-hydric soil. The U.S. Fish and Wildlife Service National Wetland Inventory (NWI) map does not show wetlands on or near the site. Aerial photographs show the site was previously developed and no wetness patterns are evident. Because of the current snow cover, an on-site inspection is not definitive. However, the ground cover for the vacant lot is known to be mowed turf grass and there is no standing water on the site. The nearest mapped wetland is approximately 0.6 miles southwest of the site.

Alternative 1, No Action Under this alternative, there would be no construction and no impact to wetlands.

Alternative 2, Expand Existing Facility Under this alternative, construction at the existing fire station would impact only pavement and mowed turf grass areas. There would be no impact to wetlands.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, construction of the new Fire & EMS Facility would impact only pavement and mowed turf grass areas. There would be no impact to wetlands.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, construction of the new Fire & EMS Facility would impact only pavement and mowed turf grass areas. There would be no impact to wetlands.

### **3.2.3 Threatened and Endangered Species**

In accordance with Section 7 of the Endangered Species Act of 1973, the project area was evaluated for the potential occurrences of Federally-listed threatened and endangered species. The Endangered Species Act of 1973 requires any Federal agency that funds, authorizes, or carries out an action to ensure that this action is not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of designated critical habitats (FEMA 1996).

The proposed sites are highly developed, in an urban environment, with mowed turf grass, shrubs and trees for ground cover. The U.S. Fish and Wildlife Service (USFWS) lists the following endangered and threatened species for Cook County, Illinois:

- Arctic Peregrine Falcon (*falco peregrinus tundrius*) (status: recovery)
- Piping Plover (*charadrius melodus*) (status: endangered)
- Catspaw Clams (*epioblasma obliquata*) (status: experimental & non-essential)
- Tubercled Blossom Clams (*epioblasma torulosa*) (status: experimental & non-essential)
- Eastern Prairie Fringed Orchid (*platanthera leucophaea*) (status: threatened)
- Leafy Prairie-Clover (*dalea foliosa*) (status: endangered)
- Mead's Milkweed (*asclepias meadii*) (status: threatened)
- Prairie Bush Clover (*lespedeza leptostachya*) (status: threatened)

- Hine's Emerald Dragonfly (*somatochlora hineana*) (status: endangered)
- Indiana Bat (*myotis sodalist*) (status: endangered)
- Eastern Massasauga (*sistrurus catenatus*) (status: candidate)

In a February 8, 2010 letter to file, FEMA Region V Environmental Protection Specialist Nicholas Mueller discusses his review of the potential impacts to federally listed endangered, threatened and candidate species. His letter states "No suitable habitat for the federally listed endangered, threatened, or candidate species is present at the proposed project location. Based on the site description and project activity, the Proposed Action at the City of Chicago site will have "no effect" on the listed species, their habitats or proposed or designated critical habitat". A copy of the letter is included in Appendix C.

According to the Illinois Department of Natural Resources' Ecological Compliance Assessment Tool (EcoCAT), the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Heritage Area Inventory Sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Alternative 1, No Action Under this alternative, there would be no proposed construction and no impacts to known threatened and endangered species.

Alternative 2, Expand Existing Facility Under this alternative, the proposed site would remain in its current condition and there would be no impacts to known threatened and endangered species. The existing fire station is also in a suburban environment. The site ground cover consists of building, pavement and mowed turf grass. The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Heritage Area Inventory Sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. The expansion of the existing Fire & EMS Facility would cause no impacts to known threatened and endangered species.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, the proposed site would be redeveloped, with a building and a parking lot. According to the Illinois Department of Natural Resources' Ecological Compliance Assessment Tool (EcoCAT), the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Heritage Area Inventory Sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. The construction of a new Fire & EMS Facility would cause no impacts to known threatened and endangered species.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, the proposed site would be redeveloped, with a building and a parking lot. According to the Illinois Department of Natural Resources' Ecological Compliance Assessment Tool (EcoCAT), the Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Heritage Area Inventory Sites, dedicated Illinois Nature Preserves, or

registered Land and Water Reserves in the vicinity of the project location. The construction of a new Fire & EMS Facility would cause no impacts to known threatened and endangered species.

### **3.3 HAZARDOUS MATERIALS**

To identify potential hazardous materials sites in the vicinity of the project area, the Village of Western Springs contracted with Huff & Huff Incorporated of LaGrange, Illinois to prepare a Phase I Environmental Site Assessment (ESA). The ESA was conducted in December 2005 and January 2006, and at the time of the investigation, the site included a one-story office building, with an associated parking lot and landscaping. The ESA revealed no evidence of recognized environmental conditions at the site. A copy of the executive summary from the 2006 Huff & Huff ESA report is included in Appendix D.

The office was constructed in the mid-1960s and used by Bellevue Builders, Inc., a residential development company. It was subsequently used as an office for the Timber Trails Country Club, Inc., before being purchased by the Village and razed. A 1951 aerial photograph shows the site and surrounding property being used for farm fields. A 1962 aerial photograph shows the lot as vacant land, with residential development to the north, commercial development to the east, and a golf course to the south. A 1971 aerial photograph shows the lot with the office building, commercial development to the east, and residential development to the north, west and south. The surrounding properties were developed in the 1950s and 1960s as residential and commercial properties, and were farmland prior to development. Historic aerial photographs are provided in Appendix A.

The site is currently a vacant lot, with mowed turf grass for ground cover, and is owned and maintained by the Village of Western Springs. A visual inspection of the site is currently hampered by snow cover, but there were no signs of vegetation staining, nor was there any evidence of hazardous waste generators in the vicinity last summer. In conclusion, there are no known underground tanks or other hazardous materials on the site.

Alternative 1, No Action Under this alternative, there will be no proposed construction and would therefore be no impacts due to hazardous materials.

Alternative 2, Expand Existing Facility Under this alternative, no impacts due to hazardous materials are anticipated. Although subsurface hazardous materials are not anticipated to be present, excavation activities could expose or otherwise affect subsurface hazardous wastes or materials. Any hazardous materials discovered, generated, or used during the implementation of the proposed project shall be disposed of and handled by the Village of Western Springs in accordance with applicable local, State and Federal regulations.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, no impacts due to hazardous materials are anticipated. Although subsurface hazardous materials are not anticipated to be present, excavation activities could expose or otherwise affect subsurface hazardous wastes

or materials. Any hazardous materials discovered, generated, or used during the implementation of the proposed project shall be disposed of and handled by the Village of Western Springs in accordance with applicable local, State and Federal regulations.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, no impacts due to hazardous materials are anticipated. Although subsurface hazardous materials are not anticipated to be present, excavation activities could expose or otherwise affect subsurface hazardous wastes or materials. Any hazardous materials discovered, generated, or used during the implementation of the proposed project shall be disposed of and handled by the Village of Western Springs in accordance with applicable local, State and Federal regulations.

### **3.4 SOCIOECONOMICS**

#### **3.4.1 Zoning and Land Use**

The proposed project site is located at the southeast corner of Grand Avenue and 55<sup>th</sup> Street in the south-central portion of the Village of Western Springs. The site is currently zoned O (Limited Office District) and is vacant. The site is shown on the Long Range Land Use Plan Map as Office (a commercial area consisting of low-rise [1-2 story] office buildings, usually on separate parcels and with dedicated parking lots). This may be revised to Municipal / Governmental (areas consisting of municipal facilities such as the Village Hall or Public Works garage) if the proposed fire station is constructed on this parcel. Copies of the Village of Western Springs Official Zoning Map and the Village of Western Springs Long Range Land Use Plan Map are included in Appendix A.

Alternative 1, No Action Under this alternative, there will be no proposed construction and would therefore be no impacts to existing zoning or land use patterns.

Alternative 2, Expand Existing Facility Under this alternative, expansion of the existing fire station would have no impact on existing zoning or land use patterns. The existing fire station property is currently zoned R-2 (single family residence) and the existing and proposed use is consistent with current zoning. The property may be rezoned to MGL (municipal and governmental land) in the future. A Village of Western Springs building permit would be issued after the plans were reviewed and approved and before the start of construction.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, construction of the proposed Fire and EMS Facility will have no impact on existing zoning or land use patterns. The proposed fire station property currently zoned R-1 (single family residence) and the existing and proposed use is consistent with current zoning. The property may be rezoned to MGL (municipal and governmental land) in the future. A Village of Western Springs building permit would be issued after the plans were reviewed and approved and before the start of construction.

Alternative 4, New Facility - 5501 Grand Avenue (Proposed Action) Under this alternative, construction of the proposed Fire and EMS Facility will have no impact on existing zoning or land use patterns. The proposed fire station property was recently rezoned MGL (municipal and governmental land) and the proposed use is consistent with current zoning. A Village of Western Springs building permit would be issued after the plans were reviewed and approved and before the start of construction.

### **3.4.2 Visual Resources**

The proposed site at 5501 Grand Avenue is a vacant parcel covered with mowed turf grass. To the north, 55<sup>th</sup> Street is a four-lane roadway with painted median and curb & gutter. The area north of 55<sup>th</sup> Street is developed with single family homes on 1/3 acre lots. East of the proposed site is a two-story office building and asphalt parking lot. South of the proposed site are single family homes on 1/4 acre lots, screened from the site by trees and shrubs along the south property line. To the west, Grand Avenue is two-lane street with curb & gutter. On the west side of Grand Avenue are single family homes on 1/3 acre lots, screened from the site by trees in the parkway of the public street.

Alternative 1, No Action Under this alternative, there will be no proposed construction and the view of 5501 Grand Avenue will remain unchanged.

Alternative 2, Expand Existing Facility Under this alternative, expansion of the existing fire station on Wolf Road, north of the BNSF railroad tracks, would have an impact on the view of the site. The site is bordered by single family homes to the west and east, the Village Hall to the south, and a parking lot and landscaped park area to the north. Expansion of the existing facility would require encroachment into the park area and the removal of some of the large trees.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, construction of the proposed Fire and EMS Facility would have some impact on the neighbor's view of the property. In order to mitigate these impacts, the new facility would be a single story structure, with a small footprint, functional efficiency, and it would be fiscally responsible and neighborhood friendly. Additionally, the architecture of the proposed facility would be designed to have a residential appearance and the site will be landscaped with trees and shrubs to blend in with the surrounding properties.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, construction of the proposed Fire and EMS Facility would have some impact on the neighbor's view of the property. In order to mitigate these impacts, the new facility would be a single story structure, with a small footprint, functional efficiency, and would be fiscally responsible and neighborhood friendly. Additionally, the architecture of the proposed facility was designed to have a residential appearance and the site will be landscaped with trees and shrubs to blend in with the surrounding properties. A sketch of the proposed facility is included in the September 7, 2009 Village white paper in Appendix D.

### 3.4.3 Noise

Noise can be considered unwanted sound and sound is typically measured in decibels (dB). The 1974 document prepared by the USEPA, titled *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, provides a basis for State and local governments to set noise standards. The document identifies an upper limit of 70 dB for 24-hour exposure in order to prevent measurable hearing loss over a lifetime. Upper limits of 55dB (outdoors) and 45 dB (indoors) can be used to avoid activity interference and annoyance. These levels are considered those which will permit spoken conversation and other activities, such as sleeping, working and recreation, without interference. These levels are single event, or peak, levels, but rather, they represent averages over long periods of time. Occasional higher noise levels will still provide a 24-hour average below 70 dB as long as extended periods of relative quiet are provided. A typical emergency vehicle siren may produce 115 dB at a distance of ten feet, but the sound drops off exponentially with distance, and may be only 90 dB at 160 feet.

Alternative 1, No Action Under this alternative, there will be no proposed construction, so there will be no temporary increase in short-term noise levels. The number of emergency response events, and the attendant long-term noise levels, at the existing fire station would also remain unchanged.

Alternative 2, Expand Existing Facility Under this alternative, expansion of the existing fire station on Wolf Road would result in temporary short-term construction noise. To reduce short-term noise levels, construction activities would be restricted to normal business hours and construction machinery would be required to be in good condition, and to meet Village noise limits. The number of emergency response events, and the attendant long-term noise levels, at the existing fire station would also remain unchanged.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, construction of the proposed Fire and EMS Facility would result in temporary short-term construction noise. To reduce short-term noise levels, construction activities would be restricted to normal business hours and construction machinery would be required to be in good condition, and to meet Village noise limits. The emergency response events at the proposed fire station would cause an increase in the long-term neighborhood noise levels. The number of emergency response events, and the attendant long-term noise levels, at the existing fire station would actually be reduced, as most calls south of the BNSF railroad tracks would be answered by the new facility. To further mitigate the long-term noise impacts at the new facility, the emergency power generator would be housed inside the facility instead of outside the building, in the side or rear yards. However, emergency vehicles answering a call will have to activate their sirens as they leave the station, and this will cause noise impact to the residential subdivision, especially to the three houses adjacent to the site.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, construction of the proposed Fire and EMS Facility would result in temporary short-term construction noise. To reduce short-term noise levels, construction activities would be restricted to normal business hours and construction machinery would be required to be in good condition, and to meet Village noise limits. The emergency response events at the proposed fire station would cause an increase in the long-term neighborhood noise levels. The number of emergency response events, and the attendant long-term noise levels, at the existing fire station would actually be reduced, as most calls south of the BNSF railroad tracks would be answered by the new facility. To further mitigate the long-term noise impacts at the new facility, the emergency power generator would be housed inside the facility instead of outside the building, in the side or rear yards.

It is imperative that emergency vehicles use lights and sirens to protect both the first responders and the motorists on the road. However, in an effort to reduce the noise impact to the adjacent residential neighborhood, emergency vehicles answering a call will not activate their sirens until they turn off Grand Avenue onto 55<sup>th</sup> Street. Additionally, a fence will be installed and six trees and 35 shrubs will be planted along the south property line to provide both visual and noise screening. In planning for this facility, several public meeting were held and neighborhood input on noise levels as well as other issues was solicited. The proposed noise mitigation measures were incorporated into the plan to address those concerns.

### **3.4.4 Public Services and Utilities**

Public services to both the proposed facility at 5501 Grand Avenue, to 5000 Wolf Road, and to the existing fire station at 4353 Wolf Road are provided by the Village of Western Springs. These include police, fire, water and sanitary sewer services. Electric service to both facilities is provided by Commonwealth Edison. Natural gas service to both facilities is provided by NICOR Gas.

Alternative 1, No Action Under this alternative, there would be no changes to public services, other than fire and emergency medical services, or utilities but no improvements to emergency response times would be provided. In both the short-term and long-term, response time would continue to increase as roadway and train traffic volumes increase. No road closures or utility shutdowns would be necessary under the no-action alternative. All required utilities are currently available to the existing fire station and construction of additional utilities would not be required.

Alternative 2, Expand Existing Facility Under this alternative, there will be no changes to the public services, other than fire and emergency medical services, or the utilities for the expanded existing fire station on Wolf Road. However, emergency response times to the south part of the Village would still be compromised by increasing roadway and train traffic volumes. All construction would take place on the existing fire station property, so no road closures or utility

shutdowns would be necessary. All required utilities are currently available to the existing fire station site and construction of additional utilities would not be required.

Alternative 3, New Facility – 5000 Wolf Road A portion of this site was previously public right-of-way. Under this alternative, it would be necessary to relocate sanitary sewers and water mains on the property, as well as other public utilities, to construct the facility. While this option would enhance fire and emergency medical services to the south part of town by locating first responders south of the railroad tracks, the utility relocation would result in short-term interruptions to water and sewer service for the immediate neighborhood. There would be no long-term impacts. All required utilities are currently available to this site and construction of additional utilities would not be required.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, there will be no changes to the public services, other than fire and emergency medical services, or the utilities for the proposed facility at 5501 Grand Avenue. The proposed action would enhance fire and emergency medical services to the south part of town by locating first responders south of the railroad tracks and closer to the south side residential neighborhoods. Construction would take place on the proposed fire station property and on Grand Avenue. The roadway construction consists of widening, so road closures or utility shutdowns would not be necessary. All required utilities are currently available to the proposed fire station site and construction of additional utilities, other than on-site services, would not be required.

### **3.4.5 Traffic and Circulation**

The existing fire station is located on the east side of Wolf Road, next to the Village Hall, and 425 feet north of the BNSF railroad tracks. Wolf Road is two-lane arterial roadway, under the jurisdiction of the Cook County Highway Department, with an Average Daily Traffic (ADT) volume of 11,100 vehicles.

The proposed site is located at the southeast corner of 55<sup>th</sup> Street and Grand Avenue. Fifty-fifth Street is a four-lane arterial roadway, also under the jurisdiction of the Illinois Department of Transportation, with an Average Daily Traffic (ADT) volume of 20,600 vehicles. It serves as a major east-west route, traveling from Naperville on the west end, through Lisle, Downers Grove, Clarendon Hills, Hinsdale, Western Springs, Countryside, and ending at Joliet Road in McCook. Two blocks to the east, 55<sup>th</sup> Street intersects with Wolf Road, a two-lane Cook County Highway Department arterial with an ADT volume of 9,100 vehicles. Grand Avenue is a Village of Western Springs local street. Because it is one of only three entrances into the Ridgewood subdivision, it has an estimated ADT volume of 1,100 vehicles.

Traffic and circulation issues are the major reason a new fire station and EMS facility are needed. With each passing year, the volume of traffic on area streets increases, with a resultant negative impact on emergency response times. To answer calls in the southern part of the Village, emergency vehicles use Wolf Road, a two-lane street with significant traffic volumes

during the morning and evening peak periods. Additionally, Wolf Road crosses the BNSF railroad tracks, 47<sup>th</sup> Street (an Illinois Department of Transportation four-lane arterial, with an ADT volume of 10,200 to 15,300 vehicles) and 55<sup>th</sup> Street. In addition to roadway congestion, both BNSF freight traffic and METRA commuter rail traffic levels have increased, often causing significant delays for emergency calls south of the railroad tracks. In 2006, a large residential subdivision was annexed to the Village. This subdivision has now become the southernmost neighborhood in Western Springs. Accordingly, emergency calls to this subdivision currently have the longest average response times.

Alternative 1, No Action Under this alternative, no impacts to traffic patterns are anticipated. However, as traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times will also continue to increase, negatively impacting the general population in the Village.

Alternative 2, Expand Existing Facility Under this alternative, no impacts to traffic patterns are anticipated. However, as traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times will also continue to increase, negatively impacting the general population in the Village.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, there will be no adverse impacts to traffic patterns in the Village. When answering calls, emergency equipment will have immediate access to two-lane Wolf Road. Although train delays will no longer be an issue, as traffic volumes on Wolf Road continue to increase, emergency response times will also continue to increase, negatively impacting the general population in the Village.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, there will be no adverse impacts to traffic patterns in the Village. Other than when answering calls from the adjacent residential subdivision, emergency equipment will have immediate access to four-lane 55<sup>th</sup> Street. Flashing beacons will be installed on 55<sup>th</sup> Street both east and west of Grand Avenue to warn traffic of entering emergency vehicles. The flashing beacons will be activated by an optical trigger at the Grand Avenue – 55<sup>th</sup> Street intersection and also by a pushbutton in the fire station. The addition of a south side satellite fire station will have a positive impact on local traffic patterns, as calls to the south part of the Village will no longer require emergency vehicles to travel the length of Wolf Road, through the central business district.

### **3.4.6 Environmental Justice (Executive Order 12898)**

On November 6, 2000, President Clinton signed Executive Order 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. This order directs Federal agencies to make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health

or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

Socioeconomic and demographic data for the project area were analyzed to determine if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project. The U.S. Census Bureau data for Western Springs, Illinois states that 98.3% of the population is white, 1.7% is Hispanic, 0.7% is Asian, 0.5% is of two or more races, and 0.2% is some other race. The median annual household income (in 1999 dollars) was \$98,876; with 26 families (0.7% of the population) below the poverty level (U.S. Census, 2000). Minority and/or low-income populations are not concentrated near the proposed project site.

Alternative 1, No Action Under this alternative, there will be no disproportionate or adverse impacts to minority or low-income populations in the Village. However, as traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times will also continue to increase, negatively impacting the general population in the Village.

Alternative 2, Expand Existing Facility Under this alternative, there will be no disproportionate or adverse impacts to minority or low-income populations in the Village. However, as traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times to the southern portion of Western Springs will also continue to increase, negatively impacting the general population.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, there will be no disproportionate or adverse impacts to minority or low-income populations in the Village. To the contrary, this alternative will reduce emergency response times in the southern portion of Western Springs, benefitting the general population, reducing property damage due to fire and possibly saving lives.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, there will be no disproportionate or adverse impacts to minority or low-income populations in the Village. To the contrary, this alternative will reduce emergency response times in the southern portion of Western Springs, benefitting the general population, reducing property damage due to fire and possibly saving lives.

### **3.4.7 Safety and Security**

To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in the proper use of appropriate equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner in accordance with the standards specified in Occupational and Safety Health Act (OSHA) regulations. Executive Order 13045, *Protection of Children*, requires Federal agencies to assign a

high priority to identifying and assessing environmental health and safety risks that may disproportionately affect children.

Alternative 1, No Action Under this alternative, there would be no construction and no direct impacts to safety of the population would occur. Emergency calls would continue to be answered by the existing fire station on Wolf Road, north of the BNSF railroad tracks. However, as traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times will also continue to increase. Thus, the no-action alternative will result in an indirect negative impact to the general population, in the southern portion of the Village. There would be no disproportionate health or safety risks to children.

Alternative 2, Expand Existing Facility Under this alternative, improvements to the existing fire station on Wolf Road, north of the BNSF railroad tracks, would provide increased protection for area residents during emergency events. However, as traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times will also continue to increase. Thus, expansion of the existing fire station will result in an indirect negative impact to the general population in the southern portion of the Village.

Construction activities at the existing fire station would present safety risks to those performing the activities. Access to the site would be restricted during construction to protect the public and to minimize risks to safety and human health. The appropriate signage and barriers would be installed prior to construction activities to alert nearby pedestrians and motorists. There would be no disproportionate health or safety risks to children.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, construction of a new fire station in the south part of the Village would provide increased protection for area residents during emergency events. As traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times will also continue to increase. Thus, having a second fire and EMS facility in the southern portion of the Village will have a positive impact to the general population in the southern portion of the Village.

Construction activities at the new fire station would present safety risks to those performing the activities. Access to the site would be restricted during construction to protect the public and to minimize risks to safety and human health. The appropriate signage and barriers would be installed prior to construction activities to alert nearby pedestrians and motorists. There would be no disproportionate health or safety risks to children.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, construction of a new fire station in the south part of the Village would provide increased protection for area residents during emergency events. As traffic volumes on area roadways and on the BNSF Railroad continue to increase, emergency response times will also continue to increase. Thus, having a second fire and EMS facility in the southern portion of the Village will have a positive impact to the general population in the southern portion of the Village.

Construction activities at the new fire station would present safety risks to those performing the activities. Access to the site would be restricted during construction to protect the public and to minimize risks to safety and human health. The appropriate signage and barriers would be installed prior to construction activities to alert nearby pedestrians and motorists. There would be no disproportionate health or safety risks to children.

### **3.5 HISTORICAL AND CULTURAL RESOURCES**

In addition to review under NEPA, consideration of effects to historic properties is mandated under Section 106 of the National Historic Preservation Act (NHPA), as amended, and as implemented by 36 CFR Part 800. Requirements include identification of significant historic properties that may be affected by the Proposed Action. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in, or eligible for listing in, the National Register of Historic Places (NRHP) (36 CFR 60.4).

As defined in 36 CFR Part 800.16(d), the Area of Potential Effect (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. In addition to identifying historic properties that may exist in the proposed project's APE, FEMA must also determine, in consultation with the appropriate State Historic Preservation Officer (SHPO) / Tribal Historic Preservation Officer (THPO), what effect, if any, the action would have on historic properties. Moreover, if the project would have an adverse effect on these properties, FEMA must consult with the SHPO / THPO on ways to avoid, minimize, or mitigate the adverse effect.

During construction, ground disturbing activities would be monitored. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the Illinois Historic Preservation Agency (IHPA) would be notified.

#### **3.5.1 Historic Structures and Archaeological Resources**

A number of historic structures and archaeological resources have been identified in Western Springs through use of the HAARGIS database on the Illinois Historic Preservation Agency website (see map and report in Appendix A). However, none of the identified structures or resources is in the vicinity of the proposed south side satellite fire station. The closest historic structure is at 4839 South Wolf Road, approximately 0.78 miles to the north.

On February 18, 2010, a letter and supporting documentation was submitted to the SHPO (IHPA) by FEMA with a Request for SHPO Comment and Consultation on a Federal Undertaking. The request included documentation gathered by James J. Benes & Associates on historic properties in the area of the proposed project site. On March 11, 2010 the SHPO responded to FEMA, providing concurrence with the determination that no historic properties

will be affected by the proposed project. Copies of the February 18, 2010 FEMA submittal and the March 11, 2010 SHPO response are included in Appendix C.

Alternative 1, No Action Under this alternative, there would be no construction and no adverse impacts to historic structures or archaeological resources.

Alternative 2, Expand Existing Facility There is one historic structure two blocks east and one block south from the existing fire station, and several historic structures two blocks west of the existing fire station. Under this alternative, improvements to the existing fire station on Wolf Road would cause no adverse impact to historic structures or known archaeological resources. During construction, ground disturbing activities would be monitored. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.

Alternative 3, New Facility – 5000 Wolf Road Under this alternative, construction of a new Fire and EMS Facility at 5000 Wolf Road would cause no adverse impact to historic structures or known archaeological resources. A 1951 aerial photograph shows the site and surrounding property being used for farm fields. Both 1962 and 1971 aerial photographs show the lot as residential property. Historic aerial photographs are provided in Appendix A.

During construction, ground disturbing activities would be monitored. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.

Alternative 4, New Facility – 5501 Grand Avenue (Proposed Action) Under this alternative, construction of a new Fire and EMS Facility at 5501 Grand Avenue would cause no adverse impact to historic structures or known archaeological resources. A 1951 aerial photograph shows the site and surrounding property being used for farm fields. A 1962 aerial photograph shows the lot as vacant land, with residential development to the north, commercial development to the east, and a golf course to the south. A 1971 aerial photograph shows the lot with the recently razed office building, commercial development to the east, and residential development to the north, west and south. The surrounding properties were developed in the 1950s and 1960s as residential and commercial properties, and were farmland prior to development. Historic aerial photographs are provided in Appendix A.

During construction, ground disturbing activities will be monitored. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.

### **3.5.2 Tribal Coordination and Religious Sites**

On November 6, 2000, President Clinton signed Executive Order 13175, entitled *Consultation and Coordination with Indian Tribal Governments*. This order directs Federal agencies to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.

There are no known Federally recognized Indian tribal groups in Illinois. However, the following four Indian tribal groups have been identified as plaintiffs in land claims cases in Cook County, Illinois: the Citizen Potawatomi Nation of Shawnee, Oklahoma; the Forest County Potawatomi Community of Crandon, Wisconsin; the Hannahville Indian Community of Wilson, Michigan; and the Prairie Band of Potawatomi Nation of Mayetta, Kansas. A request for evaluation of the presence or absence of known archaeological and Indian religious sites within the proposed project area was sent to these tribal groups on February 18, 2010.

An evaluation request was also sent on February 18, 2010 to the following additional tribal groups: the Miami Tribe of Oklahoma, the Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas, The Kickapoo Traditional Tribe of Texas, the Kickapoo Tribe of Oklahoma, the Ottawa Tribe of Oklahoma, the Pokagon Band of Potawatomi Indians, the Match-e-be-nash-she-wish Band of Potawatomi Indians of Michigan, the Nottawaseppi Huron Band of Potawatomi, the Peoria Tribe of Indians of Oklahoma, the Sac & Fox Tribe of the Mississippi in Iowa, the Sac and Fox Nation of Missouri, the Citizen Potawatomi Nation, the Sac and Fox Nation of Oklahoma, and the Wyandotte Nation. On March 11, 2010 the Peoria Tribe of Indians of Oklahoma responded that they are unaware of any documentation directly linking Indian religious sites to the proposed construction; and that they have no objection to the proposed construction. Copies of the correspondence are provided in Appendix C.

## **3.6 COMPARISON OF ALTERNATIVES**

This section describes the potential impacts of the proposed alternatives and the no-action alternative. Where potential impacts exist, conditions of development or mitigation measures to offset these impacts are detailed in the body of this document. A summary table is provided below:

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.1.1 Geology, Seismicity and Soils</b>	None	No impact to seismicity or geology. Short-term impacts to soils would be mitigated by erosion control measures during construction. Total excavation will be +/- 965 cubic yards, including 730 cubic yards for an underground detention facility. All excess excavated soil will be trucked off-site and properly disposed of.	No impact to seismicity or geology. Short-term impacts to soils will be mitigated by erosion control measures during construction. Total excavation will be +/- 965 cubic yards, including 730 cubic yards for an underground detention facility. All excess excavated soil will be trucked off-site and properly disposed of.	No impact to seismicity or geology. Short-term impacts to soils will be mitigated by erosion control measures during construction. Total excavation will be +/- 965 cubic yards, including 730 cubic yards for an underground detention facility. All excess excavated soil will be trucked off-site and properly disposed of.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.1.2 Water Resources &amp; Water Quality (including surface water and ground water)</b>	None	No permanent impacts to water resources and water quality. Short-term impacts would be mitigated by erosion control measures during construction. An underground stormwater detention facility would be installed to store approximately 8,086 cubic feet of runoff.	No permanent impacts to water resources and water quality. Short-term impacts will be mitigated by erosion control measures during construction. An underground stormwater detention facility would be installed to store approximately 8,086 cubic feet of runoff.	No permanent impacts to water resources and water quality. Short-term impacts will be mitigated by erosion control measures during construction. An underground stormwater detention facility will be installed to store approximately 8,086 cubic feet of runoff.
<b>3.1.3 Floodplains</b>	None	None. Existing facility is outside of the floodplain.	None. Proposed facility will be outside of the floodplain.	None. Proposed facility will be outside of the floodplain.
<b>3.1.4 Air Quality</b>	None	No permanent impacts to air quality. Temporary impacts would be mitigated by dust control watering during construction and turning off the engines of construction equipment when it is not in use.	No permanent impacts to air quality. Temporary impacts will be mitigated by dust control watering during construction and turning off the engines of construction equipment when it is not in use.	No permanent impacts to air quality. Temporary impacts will be mitigated by dust control watering during construction and turning off the engines of construction equipment when it is not in use.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.2.1 Aquatic &amp; Terrestrial Environments</b>	None	Existing site is building, pavement and mowed turf grass lawns, with no standing water. Impacts to terrestrial environment would be negligible.	Proposed site is pavement and mowed turf grass, with no standing water. Impacts to terrestrial environment will be negligible.	Proposed site is pavement and mowed turf grass, with no standing water. Impacts to terrestrial environment will be negligible.
<b>3.2.2 Waters of the U. S. Including Wetlands</b>	None	None. There are no Waters of the U.S. or wetlands on or near the site.	None. There are no Waters of the U.S. or wetlands on or near the site.	None. There are no Waters of the U.S. or wetlands on or near the site.
<b>3.2.3 Threatened &amp; Endangered Species</b>	None	None. There are no known reports of threatened or endangered species on or near the site.	None. There are no known reports of threatened or endangered species on or near the site.	None. There are no known reports of threatened or endangered species on or near the site.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.3.0 Hazardous Materials</b>	None	None. There are no known underground tanks or other hazardous materials on or adjacent to the site. If hazardous materials are discovered on site during construction, they will be disposed of in accordance with federal, state and local requirements.	None. There are no known underground tanks or other hazardous materials on or adjacent to the site. If hazardous materials are discovered on site during construction, they will be disposed of in accordance with federal, state and local requirements.	None. There are no known underground tanks or other hazardous materials on or adjacent to the site. If hazardous materials are discovered on site during construction, they will be disposed of in accordance with federal, state and local requirements.
<b>3.4.1 Zoning &amp; Land Use</b>	None	None. Zoning could remain R-2, but may change to MGL. Land use would not change.	None. Zoning could remain R-1, but may change to MGL. Land use will change from residential to municipal / governmental.	None. Zoning will remain MGL. Land use will change from limited office to municipal / governmental.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.4.2 Visual Resources</b>	None	Expansion of the building would require encroachment into the parking lot and lawn areas and may require the removal of some mature shade trees.	Proposed facility will have an impact on nearby residents' view of the now-vacant lot. Impacts can be mitigated by using single-story architecture with a residential style façade; and by the use of landscaping around the new facility and parking lot to blend in with the adjacent residential properties.	Proposed facility will have an impact on nearby residents' view of the now-vacant lot. Impacts will be mitigated by using single-story architecture with a residential style façade; and by the use of landscaping around the new facility and parking lot to blend in with the adjacent residential properties.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.4.3 Noise</b>	None	No permanent impacts to noise levels. Temporary impacts caused by construction activities would be mitigated by restricting construction to normal business hours and ensuring that construction equipment is in good running order. There would be no permanent noise impact due to sirens as the number of emergency responses would remain the same.	Temporary impacts caused by construction activities will be mitigated by restricting construction to normal business hours and ensuring that construction equipment is in good running order. Emergency vehicle sirens would have an impact on the three adjacent residential properties. The noise impact due to sirens would be mitigated to some extent by the construction of fences and the planting of landscape buffers along the north, west and south property lines.	Temporary impacts caused by construction activities will be mitigated by restricting construction to normal business hours and ensuring that construction equipment is in good running order. Emergency vehicle sirens will have an impact on the nearby residential properties. The noise impact due to sirens will be mitigated to some extent by the construction of a fence and the planting of a landscape buffer along the south property line. Additionally, sirens will not be activated until the vehicles are on 55 <sup>th</sup> Street.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.4.4 Public Services &amp; Utilities</b>	None	None	Proposed construction would require the relocation of public water mains and sanitary sewers, as well as other utilities. This will have a temporary impact on the surrounding properties.	No impacts to police, water, sewer, telephone, electric or gas services. The new station will have a very positive impact on fire protection and emergency medical services for the south portion of the Village.
<b>3.4.5 Traffic &amp; Circulation</b>	None	None. Continually increasing traffic volumes will continue to have an increasing negative impact on emergency response times.	None. Continually increasing traffic volumes on Wolf Road will continue to have an increasing negative impact on emergency response times.	None. Proposed facility is located near the intersection of two major streets: 55th Street and Wolf Road. Flashing beacons will warn of emergency vehicles entering 55 <sup>th</sup> Street from Grand Avenue.
<b>3.4.6 Environmental Justice</b>	None	None. Minority and low-income populations are low and are evenly dispersed among the Village population.	None. Minority and low-income populations are low and are evenly dispersed among the Village population.	None. Minority and low-income populations are low and are evenly dispersed among the Village population.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.4.7 Safety &amp; Security</b>	Continually increasing traffic volumes will continue to have an increasing negative impact to the safety and security of the population in the south portion of the Village, due to increasing emergency response times from the existing facility.	Continually increasing traffic volumes will continue to have an increasing negative impact to the safety and security of the population in the south portion of the Village, due to increasing emergency response times from the existing facility.	Proposed facility will have a positive impact on the safety and security of the residents in the south portion of the Village by reducing emergency response times.	Proposed facility will have a positive impact on the safety and security of the residents in the south portion of the Village by reducing emergency response times.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.5.1 Historic Structures and Archaeological Resources</b>	None	None. No known historic structures or archaeological artifacts on or near the existing facility. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.	None. No known historic structures or archaeological artifacts on or near the proposed facility site. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.	None. No known historic structures or archaeological artifacts on or near the proposed facility site. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.

<b>Table 1: Impact and Mitigation Summary</b>				
<b>Section</b>	<b><i>Alternate 1 No Action</i></b>	<b><i>Alternate 2 Expand Existing Facility</i></b>	<b><i>Alternate 3 New Facility 5000 Wolf Road</i></b>	<b><i>Alternate 4 New facility 5501 Grand Avenue (Proposed Action)</i></b>
<b>3.5.2 Tribal Coordination &amp; Religious Sites</b>	None	None. No known Native American burials or archaeological artifacts on or near the existing facility. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.	None. No known Native American burials or archaeological artifacts on or near the proposed facility site. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.	None. No known Native American burials or archaeological artifacts on or near the proposed facility site. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the IHPA would be notified.

## **SECTION FOUR: CUMULATIVE IMPACTS**

According to CEQ regulations, cumulative impacts represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).” In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site.

No current or proposed actions by others which may impact the environment were identified in the vicinity of the proposed project site. Therefore, the only impact to the environment is from the proposed project and cumulative impacts are not anticipated.

## **SECTION FIVE: PUBLIC PARTICIPATION**

FEMA is the lead Federal agency for conducting the NEPA compliance process for the South Fire and EMS Facility in the Village of Western Springs, Cook County, Illinois. It is the goal of the lead agency to expedite the preparation and review of NEPA documents, and to be responsive to the needs of the community and the purpose and need of the proposed action, while meeting the intent of NEPA and complying with all NEPA provisions.

Interagency reviews have been conducted in the form of agency consultation letters and the responses received from the agencies. Agencies which have been consulted are listed in Section Six. Agency responses will be provided in Appendix C.

The proposed project has been discussed at numerous Western Springs plan commission meetings and village board meetings. These meetings are open to the public and public comments are welcomed.

The Village of Western Springs will notify the public of the availability of the draft EA, through publication of a public notice in The Doings newspaper and in the Village-published Tower Topics Newsletter. The affidavit of publication will be supplied to FEMA after publication. A copy of the draft public notice is included in Appendix E. FEMA will conduct a public comment period commencing on the initial date of publication of the public notice.

## **SECTION SIX: AGENCY COORDINATION AND PERMITS**

The following agencies and organizations were consulted or were contacted to request information during the preparation of this EA. Requests and response letters are included in Appendix C.

1. Illinois Historic Preservation Office
2. Village of Western Springs
3. Citizen Potawatomi Nation, Oklahoma
4. Forest County Potawatomi Community, Wisconsin
5. Hannahville Indian Community, Michigan
6. Prairie Band of Potawatomi Nation, Kansas
7. Miami Tribe of Oklahoma
8. Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas
9. Kickapoo Traditional Tribe of Texas
10. Kickapoo Tribe of Oklahoma
11. Ottawa Tribe of Oklahoma
12. Pokagon Band of Potawatomi Indians
13. Match-e-be-nash-she-wish Band of Potawatomi Indians of Michigan
14. Nottawaseppi Huron Band of Potawatomi
15. Peoria Tribe of Indians of Oklahoma
16. Sac & Fox Tribe of the Mississippi in Iowa
17. Sac and Fox Nation of Missouri
18. Citizen Potawatomi Nation
19. Sac and Fox Nation of Oklahoma
20. Wyandotte Nation
21. Illinois Department of Natural Resources EcoCAT assessment tool for threatened and endangered species.

In accordance with applicable local, State and Federal regulations, the applicant will be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site. The following permits and approvals will be required prior to the start of construction:

1. Sewerage System Permit (Metropolitan Water Reclamation District of Greater Chicago)
2. Building Permit (Village of Western Springs)
3. Plumbing Permit (Village of Western Springs)
4. Sign Permit (Village of Western Springs)
5. Occupancy Permit (Village of Western Springs)

## **SECTION SEVEN: REFERENCES**

FEMA. National Environmental Policy Act, FEMA Desk Reference. May 14, 1996.

FEMA. Flood Insurance Rate Map, Cook County, Illinois Panel 467 of 832, Map Number 17031C0467J. August 19, 2008.

Google Earth. Aerial photography. Accessed January 2010.

Illinois Department of Natural Resources, Division of Ecosystems and Environment. <http://dnrecocat.state.il.us/ecopublic/>. Accessed January 2010.

Illinois State Geological Survey. <http://www.isgs.uiuc.edu/>. Accessed January 2010.

U. S. Department of Agriculture, Natural Resources Conservation Service. <http://websoilsurvey.nrcs.usda.gov/>. Accessed January 2010.

U. S. Department of the Interior, National Park Service (Native American Graves Protection and Repatriation Act). Native American Consultation Database. <http://home.nps.gov/nacd/>. Accessed January 2010.

U. S. Environmental Protection Agency. <http://www.epa.gov/oar/oaqps/greenbk/ancl.html>. Accessed January 2010.

U. S. Fish and Wildlife Service. <http://www.fws.gov/>. Accessed January 2010.

## **SECTION EIGHT: LIST OF PREPARERS**

Preparation and quality control review of the Draft and Final Environmental Assessment for the Village of Western Springs South Fire and EMS Facility:

James J. Benes & Associates, Inc.

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James E. Darnell, P.E., CFM – Vice President – Report Preparation

Jeffery C. Ziegler – Vice President – Quality Assurance

Huff & Huff Incorporated - Phase I Environmental Site Assessment (Executive Summary in Appendix D)

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Sarah Monette, P.E. – Project Engineer – Report Preparation

James E. Huff, P.E. – Vice President – Quality Assurance

James E. Darnell was the principal preparer of this document, in consultation with Village staff as well as other individuals and agencies identified in this document.